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(71) Applicant (for all designated States except US): **TELECOM ITALIA S.p.A [IT/IT]**; Piazza degli Affari, 2, I-20123 Milano (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CAPONI, Renato [IT/IT]**; Telecom Italia S.p.A., Via G. Reiss Romoli, 274, I-10148 Torino (IT). **POTENZA, Marcello [IT/IT]**; Telecom Italia S.p.A., Via G. Reiss Romoli, 274, I-10148

Torino (IT). **ROCCATO, Diego [IT/IT]**; Telecom Italia S.p.A., Via G. Reiss Romoli, 274, I-10148 Torino (IT). **SCHIANO, Marco [IT/IT]**; TELECOM ITALIA S.p.A., Via G. Reiss Romoli, 274, I-10148 Torino (IT).

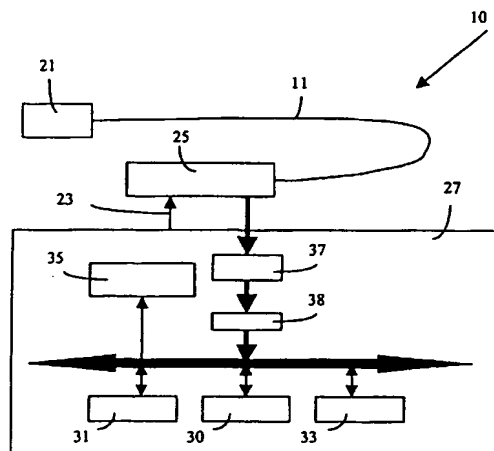
(74) Agents: **GIANNESI, Pier, Giovanni et al.**; Pirelli S.p.A., Viale Sarca 222, I-20126 Milano (IT).

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(54) Title: METHOD, SYSTEM AND DEVICE FOR MEASURING THE POLARISATION MODE DISPERSION OF AN OPTICAL FIBRE



(57) **Abstract:** The present invention relates to a new model for interpreting interferometric measurements, able to lead to a new method, system (10) and device (27) for measuring the PMD (Polarisation Mode Dispersion) of an optical fibre (11). The model, which is based on the theory of propagation of the optical signal as can be determined according to the so-called Principal States of Polarisation (PSPs) of the fibre, leads to a new interpretation of the interferogram generated with the interferometric measurements and is characterised in that it identifies in said interferogram a central peak and two side lobes. Thanks to this new model, it is possible to determine the PMD of the fibre based on the information content associated to at least one of the two side lobes identified in the interferogram.

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